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<213> Homo Sapien

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Trp Val Arg Ser Tyr Glu Phe Thr Ser Asn Ser Cys Ser Gln Arg  
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<212> DNA

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<223> Synthetic oligonucleotide probe

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 <213> Homo Sapien

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 Ala Val Leu Leu Pro Val Arg Val Asp Ser Ala Thr Ile Pro Arg  
 50 55 60  
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 65 70 75  
 Arg Ser Leu Lys Glu Glu Glu Cys Pro Ala Gly Ser His Arg Ser  
 80 85 90  
 Glu Tyr Thr Gly Ala Cys Asn Pro Cys Thr Glu Gly Val Asp Tyr  
 95 100 105  
 Thr Ile Ala Ser Asn Asn Leu Pro Ser Cys Leu Leu Cys Thr Val  
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Ser	Pro	Glu	Met	Cys	Arg	Thr	Cys	Arg	Thr	Gly	Cys	Pro	Arg	Gly	
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Lys	Asn	Glu	Ser	Ala	Ala	Ser	Ser	Thr	Gly	Lys	Thr	Pro	Ala	Ala	
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Glu	Glu	Thr	Val	Thr	Thr	Ile	Leu	Gly	Met	Leu	Ala	Ser	Pro	Tyr	
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Arg	Val	Leu	Phe	Arg	Arg	Arg	Ser	Cys	Pro	Ser	Arg	Val	Pro	Gly	
				260					265					270	
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Leu	Leu	Asp	Ala	Ser	Ala	Thr	Leu	Glu	Glu	Gly	His	Ala	Lys	Glu	
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Thr	Ile	Gln	Asp	Gln	Leu	Val	Gly	Ser	Glu	Lys	Leu	Phe	Tyr	Glu	
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<220>

<223> Synthetic oligonucleotide probe

<400> 30

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<210> 31

<211> 963

<212> DNA

<213> Homo Sapien

<400> 31

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agagctcatt ccagatgcac cctgtccag tgetgcctat agcatccgca 150

gcatcgggga gaggcctgtc ctcaaagctc cagtcccca aaggcaaaaa 200

tgtgaccact ggactccctg cccatctgac acctatgcct acaggttact 250

cagcggagggt ggcagaagca agtacgcaa aatctgcttt gaggataacc 300

tacttatggg agaacagctg ggaaatgttg ccagaggaat aaacattgcc 350

attgtcaact atgtaactgg gaatgtgaca gcaacacgat gttttgatat 400

gtatgaaggc gataactctg gaccgatgac aaagtttatt cagagtgtctg 450

ctccaaaatc cctgctcttc atggtgacct atgacgacgg aagcacaaga 500

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cttaaaaaaa aaa 963

<210> 32

<211> 235

<212> PRT

<213> Homo Sapien

<400> 32

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<223> Synthetic oligonucleotide probe

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 <212> DNA  
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<220>  
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<400> 34  
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<210> 35  
 <211> 18  
 <212> DNA  
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<220>  
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<400> 35  
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<210> 36  
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 <213> Artificial Sequence

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 <223> Synthetic oligonucleotide probe

<400> 36  
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<210> 37  
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 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 37  
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<210> 38  
 <211> 1215  
 <212> DNA  
 <213> Homo Sapien

<400> 38  
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 gctccaccg ggtcgctgc cctccgctc ctgctgttcg tggcgtacc 200

cgccctccggc tggctgacga cgggcgcccc cgagccgccg ccgctgtccg 250  
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 <211> 330  
 <212> PRT  
 <213> Homo Sapien

<400> 39  
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<212> DNA

<213> Homo Sapien

<400> 40

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<211> 263

<212> PRT

<213> Homo Sapien

<400> 41

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<223> Synthetic oligonucleotide probe

<400> 48

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<210> 49

<211> 27

<212> DNA

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<210> 50

<211> 44

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

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<210> 51

<211> 1690

<212> DNA

<213> Homo Sapien

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 ccatagataa atttggcctt aatacagttt taaccactga taattcagat 1150  
 ttgttcatta acagtattgg gattgtgcc cctgtgagag aaaaggaaga 1200  
 tcctgagcca tcaacagatg gaacatatgt ttggaagatc ttttccaag 1250  
 aaactcttac taaagcacia attttaaagc tctttctgtc ctatgattat 1300  
 gctgtgaaga agccatggct tgcatactct cactataagc ccccgagaa 1350  
 atgccccctc atcattctcc atgatcgact ttattacctc aatggcatag 1400  
 agtgtgcagc aagtgccatg gagatgagtg ccattgcagc ccacaacgct 1450  
 gcaactcttg cctatcaccg ctggaacggg cacacagaca tgattgatca 1500  
 ggatggctta tatgagaaac ttaaaactga actatgaagt gacacactcc 1550  
 tttttccctt cctagttcca aatgactatc agtggcaaaa aagaacaaaa 1600  
 tctgagcaga gatgattttg aaccagatat ttgccatta tcattgttta 1650  
 ataaaagtaa tccttgctgg tcataggaaa aaaaaaaaaa 1690

<210> 52  
 <211> 505  
 <212> PRT  
 <213> Homo Sapien

<400> 52  
 Met Gly Arg Val Val Ala Glu Leu Val Ser Ser Leu Leu Gly Leu  
 1 5 10 15  
 Trp Leu Leu Leu Cys Ser Cys Gly Cys Pro Glu Gly Ala Glu Leu  
 20 25 30

Arg Ala Pro Pro Asp Lys Ile Ala Ile Ile Gly Ala Gly Ile Gly  
35 40 45

Gly Thr Ser Ala Ala Tyr Tyr Leu Arg Gln Lys Phe Gly Lys Asp  
50 55 60

Val Lys Ile Asp Leu Phe Glu Arg Glu Glu Val Gly Gly Arg Leu  
65 70 75

Ala Thr Met Met Val Gln Gly Gln Glu Tyr Glu Ala Gly Gly Ser  
80 85 90

Val Ile His Pro Leu Asn Leu His Met Lys Arg Phe Val Lys Asp  
95 100 105

Leu Gly Leu Ser Ala Val Gln Ala Ser Gly Gly Leu Leu Gly Ile  
110 115 120

Tyr Asn Gly Glu Thr Leu Val Phe Glu Glu Ser Asn Trp Phe Ile  
125 130 135

Ile Asn Val Ile Lys Leu Val Trp Arg Tyr Gly Phe Gln Ser Leu  
140 145 150

Arg Met His Met Trp Val Glu Asp Val Leu Asp Lys Phe Met Arg  
155 160 165

Ile Tyr Arg Tyr Gln Ser His Asp Tyr Ala Phe Ser Ser Val Glu  
170 175 180

Lys Leu Leu His Ala Leu Gly Gly Asp Asp Phe Leu Gly Met Leu  
185 190 195

Asn Arg Thr Leu Leu Glu Thr Leu Gln Lys Ala Gly Phe Ser Glu  
200 205 210

Lys Phe Leu Asn Glu Met Ile Ala Pro Val Met Arg Val Asn Tyr  
215 220 225

Gly Gln Ser Thr Asp Ile Asn Ala Phe Val Gly Ala Val Ser Leu  
230 235 240

Ser Cys Ser Asp Ser Gly Leu Trp Ala Val Glu Gly Gly Asn Lys  
245 250 255

Leu Val Cys Ser Gly Leu Leu Gln Ala Ser Lys Ser Asn Leu Ile  
260 265 270

Ser Gly Ser Val Met Tyr Ile Glu Glu Lys Thr Lys Thr Lys Tyr  
275 280 285

Thr Gly Asn Pro Thr Lys Met Tyr Glu Val Val Tyr Gln Ile Gly  
290 295 300

Thr Glu Thr Arg Ser Asp Phe Tyr Asp Ile Val Leu Val Ala Thr  
305 310 315

Pro Leu Asn Arg Lys Met Ser Asn Ile Thr Phe Leu Asn Phe Asp

320	325	330
Pro Pro Ile Glu Glu Phe His Gln Tyr	Tyr Gln His Ile Val Thr	
335	340	345
Thr Leu Val Lys Gly Glu Leu Asn Thr	Ser Ile Phe Ser Ser Arg	
350	355	360
Pro Ile Asp Lys Phe Gly Leu Asn Thr	Val Leu Thr Thr Asp Asn	
365	370	375
Ser Asp Leu Phe Ile Asn Ser Ile Gly	Ile Val Pro Ser Val Arg	
380	385	390
Glu Lys Glu Asp Pro Glu Pro Ser Thr	Asp Gly Thr Tyr Val Trp	
395	400	405
Lys Ile Phe Ser Gln Glu Thr Leu Thr	Lys Ala Gln Ile Leu Lys	
410	415	420
Leu Phe Leu Ser Tyr Asp Tyr Ala Val	Lys Lys Pro Trp Leu Ala	
425	430	435
Tyr Pro His Tyr Lys Pro Pro Glu Lys	Cys Pro Ser Ile Ile Leu	
440	445	450
His Asp Arg Leu Tyr Tyr Leu Asn Gly	Ile Glu Cys Ala Ala Ser	
455	460	465
Ala Met Glu Met Ser Ala Ile Ala Ala	His Asn Ala Ala Leu Leu	
470	475	480
Ala Tyr His Arg Trp Asn Gly His Thr	Asp Met Ile Asp Gln Asp	
485	490	495
Gly Leu Tyr Glu Lys Leu Lys Thr Glu	Leu	
500	505	

<210> 53  
 <211> 728  
 <212> DNA  
 <213> Homo Sapien

<400> 53  
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 agaagacatg atgctacact cagctttggg tctctgcctc ttactcgtca 100  
 cagttttcttc caaccttgcc attgcaataa aaaaggaaaa gaggcctcct 150  
 cagacactct caagaggatg gggagatgac atcacttggg tacaaactta 200  
 tgaagaaggt ctcttttatg ctcaaaaaag taagaagcca ttaatgggta 250  
 ttcatcacct ggaggattgt caatactctc aagcactaaa gaaagtattt 300  
 gcccaaaatg aagaaataca agaaatggct cagaataagt tcatcatgct 350

aaaccttatg catgaaacca ctgataagaa tttatcacct gatgggcaat 400  
 atgtgcctag aatcatgttt gtagaccctt ctttaacagt tagagctgac 450  
 atagctggaa gataactctaa cagattgtac acatatgagc ctcgggattt 500  
 acccctattg atagaaaaca tgaagaaagc attaagactt attcagtcag 550  
 agctataaga gatgatggaa aaaagccttc acttcaaaga agtcaaattt 600  
 catgaagaaa acctctggca cattgacaaa tactaaatgt gcaagtatat 650  
 agattttgta atattactat ttagtttttt taatgtgttt gcaatagtct 700  
 tattaataata aatgtttttt aaatctga 728

<210> 54  
 <211> 166  
 <212> PRT  
 <213> Homo Sapien

<400> 54  
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 1 5 10 15  
 Val Ser Ser Asn Leu Ala Ile Ala Ile Lys Lys Glu Lys Arg Pro  
 20 25 30  
 Pro Gln Thr Leu Ser Arg Gly Trp Gly Asp Asp Ile Thr Trp Val  
 35 40 45  
 Gln Thr Tyr Glu Glu Gly Leu Phe Tyr Ala Gln Lys Ser Lys Lys  
 50 55 60  
 Pro Leu Met Val Ile His His Leu Glu Asp Cys Gln Tyr Ser Gln  
 65 70 75  
 Ala Leu Lys Lys Val Phe Ala Gln Asn Glu Glu Ile Gln Glu Met  
 80 85 90  
 Ala Gln Asn Lys Phe Ile Met Leu Asn Leu Met His Glu Thr Thr  
 95 100 105  
 Asp Lys Asn Leu Ser Pro Asp Gly Gln Tyr Val Pro Arg Ile Met  
 110 115 120  
 Phe Val Asp Pro Ser Leu Thr Val Arg Ala Asp Ile Ala Gly Arg  
 125 130 135  
 Tyr Ser Asn Arg Leu Tyr Thr Tyr Glu Pro Arg Asp Leu Pro Leu  
 140 145 150  
 Leu Ile Glu Asn Met Lys Lys Ala Leu Arg Leu Ile Gln Ser Glu  
 155 160 165  
 Leu

<210> 55  
 <211> 537  
 <212> DNA  
 <213> Homo Sapien

<400> 55  
 taaaacagct acaatattcc agggccagtc acttgccatt tctcataaca 50  
 gcgtcagaga gaaagaactg actgaaacgt ttgagatgaa gaaagttctc 100  
 ctctgatca cagccatctt ggcagtggct gttggtttcc cagtctctca 150  
 agaccaggaa cgagaaaaaa gaagtatcag tgacagcgat gaattagctt 200  
 caggggttttt tgtgttccct taccatatac catttcgccc acttccacca 250  
 attccatttc caagatttcc atggtttaga cgtaattttc ctattccaat 300  
 acctgaatct gccctacaa ctccccttcc tagcgaaaag taaacaagaa 350  
 ggataagtca cgataaacct ggtcacctga aattgaaatt gagccacttc 400  
 cttgaagaat caaaattcct gttaataaaa gaaaaacaaa tgtaattgaa 450  
 atagcacaca gcattctcta gtcaatatct ttagtgatct tctttaataa 500  
 acatgaaagc aaagattttg gtttcttaat ttccaca 537

<210> 56  
 <211> 85  
 <212> PRT  
 <213> Homo Sapien

<400> 56  
 Met Lys Lys Val Leu Leu Leu Ile Thr Ala Ile Leu Ala Val Ala  
 1 5 10 15  
 Val Gly Phe Pro Val Ser Gln Asp Gln Glu Arg Glu Lys Arg Ser  
 20 25 30  
 Ile Ser Asp Ser Asp Glu Leu Ala Ser Gly Phe Phe Val Phe Pro  
 35 40 45  
 Tyr Pro Tyr Pro Phe Arg Pro Leu Pro Pro Ile Pro Phe Pro Arg  
 50 55 60  
 Phe Pro Trp Phe Arg Arg Asn Phe Pro Ile Pro Ile Pro Glu Ser  
 65 70 75  
 Ala Pro Thr Thr Pro Leu Pro Ser Glu Lys  
 80 85

<210> 57  
 <211> 2997  
 <212> DNA  
 <213> Homo Sapien

<400> 57

cggacgcgtg ggcgggcgcg ccgggagggg cggcgggcgg catgggcccgg 50  
 gggccctggg atgcggggccc gtctcgccgc ctgctgccgc tgttgctgct 100  
 gctcggcctg gcccgcggcg ccgcgggagc gccggggccc gacggtttag 150  
 acgtctgtgc cacttgccat gaacatgcc aatgccagca aagagaaggg 200  
 aagaagatct gtatttgcaa ctatggattt gtagggaacg ggaggactca 250  
 gtgtgttgat aaaaatgagt gccagtttgg agccactctt gtctgtggga 300  
 accacacatc ttgccacaac accccggggg gcttctattg catttgccctg 350  
 gaaggatata gagccacaaa caacaacaag acattcattc ccaacgatgg 400  
 caccttttgt acagacatag atgagtgtga agtttctggc ctgtgcaggc 450  
 atggagggcg atgcgtgaac actcatggga gctttgaatg ctactgtatg 500  
 gatggatact tgccaaggaa tggacctgaa cttttccacc cgaccaccga 550  
 tgccacatca tgcacagaaa tagactgtgg taccctcctt gaggttccag 600  
 atggctatat cataggaaat tatacgtcta gtctgggcag ccaggttcgt 650  
 tatgcttgca gagaaggatt cttcagtgtt ccagaagata cagtttcaag 700  
 ctgcacaggc ctgggcacat gggagtcccc aaaattacat tgccaagaga 750  
 tcaactgtgg caaccctcca gaaatgcggc acgccatctt ggtaggaaat 800  
 cacagctcca ggctggggcg tgtggctcgc tatgtctgtc aagagggctt 850  
 tgagagccct ggaggaaaga tcacttctgt ttgcacagag aaaggcacct 900  
 ggagagaaag tactttaaca tgcacagaaa ttctgacaaa gattaatgat 950  
 gtatcactgt ttaatgatac ctgtgtgaga tggcaaataa actcaagaag 1000  
 aataaacccc aagatctcat atgtgatata cataaaagga caacggtttg 1050  
 accctatgga atcagttcgt gaggagacag tcaacttgac cacagacagc 1100  
 aggaccccag aagtgtgcct agccctgtac ccaggcacca actacaccgt 1150  
 gaacatctcc acagcacctc ccaggcgctc gatgccagcc gtcacgggtt 1200  
 tccagacagc tgaagttgat ctcttagaag atgatggaag tttcaatatt 1250  
 tcaatattta atgaaacttg tttgaaattg aacaggcggt ctaggaaagt 1300  
 tggatcagaa cacatgtacc aatttaccgt tctgggtcag aggtgggtatc 1350  
 tggctaactt ttctcatgca acatcgttta acttcacaac gaggggaacaa 1400  
 gtgcctgtag tgtgtttgga tctgtaccct acgactgatt atacggtgaa 1450









	530		535		540
Phe Asn Ile Ser	Ser Ser Ser Arg Asp	Pro Glu Val Cys Leu Asp			
	545	550			555
Leu Arg Pro Gly	Thr Asn Tyr Asn Val	Ser Leu Arg Ala Leu Ser			
	560	565			570
Ser Glu Leu Pro	Val Val Ile Ser Leu	Thr Thr Gln Ile Thr Glu			
	575	580			585
Pro Pro Leu Pro	Glu Val Glu Phe Phe	Thr Val His Arg Gly Pro			
	590	595			600
Leu Pro Arg Leu	Arg Leu Arg Lys Ala	Lys Glu Lys Asn Gly Pro			
	605	610			615
Ile Ser Ser Tyr	Gln Val Leu Val Leu	Pro Leu Ala Leu Gln Ser			
	620	625			630
Thr Phe Ser Cys	Asp Ser Glu Gly Ala	Ser Ser Phe Phe Ser Asn			
	635	640			645
Ala Ser Asp Ala	Asp Gly Tyr Val Ala	Ala Glu Leu Leu Ala Lys			
	650	655			660
Asp Val Pro Asp	Asp Ala Met Glu Ile	Pro Ile Gly Asp Arg Leu			
	665	670			675
Tyr Tyr Gly Glu	Tyr Tyr Asn Ala Pro	Leu Lys Arg Gly Ser Asp			
	680	685			690
Tyr Cys Ile Ile	Leu Arg Ile Thr Ser	Glu Trp Asn Lys Val Arg			
	695	700			705
Arg His Ser Cys	Ala Val Trp Ala Gln	Val Lys Asp Ser Ser Leu			
	710	715			720
Met Leu Leu Gln	Met Ala Gly Val Gly	Leu Gly Ser Leu Ala Val			
	725	730			735
Val Ile Ile Leu	Thr Phe Leu Ser Phe	Ser Ala Val			
	740	745			

<210> 59  
 <211> 22  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 59  
 ccacttgcca tgaacatgcc ac 22

<210> 60  
 <211> 25  
 <212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 60

cctcttgaca gacatagcga gccac 25

<210> 61

<211> 43

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 61

cactcttgtc tgtgggaacc acacatcttg ccacaactgt ggc 43

<210> 62

<211> 2015

<212> DNA

<213> Homo Sapien

<400> 62

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 ccggctagga tgggctgtct ctgggggtctg gctctgcccc ttttcttctt 100  
 ctgctgggag gttgggggtct ctgggagctc tgcaggcccc agcaccgcga 150  
 gaggagacac tgcgatgaca acggacgaca cagaagtgcc cgctatgact 200  
 ctagcacccg gccacgccgc tctggaaact caaacgctga gcgctgagac 250  
 ctcttctagg gcctcaaccc cagccggccc cattccagaa gcagagacca 300  
 ggggagccaa gagaatttcc cctgcaagag agaccaggag tttcacaaaa 350  
 acatctccca acttcatggt gctgatcgcc acctccgtgg agacatcagc 400  
 cgccagtggc agccccgagg gagctggaat gaccacagtt cagaccatca 450  
 caggcagtga tcccaggagg gccatctttg acaccctttg caccgatgac 500  
 agctctgaag aggcaaagac actcacaatg gacatattga cattgggtca 550  
 cacctccaca gaagctaagg gcctgtctc agagagcagt gcctcttccg 600  
 acggccccca tccagtcac accccgtcac gggcctcaga gagcagcgcc 650  
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cctcgccac ctccgatcca ccagctctgc ctgactccac tgaagcaaaa 950  
ccacacatca ctgaggtcac agcctctgcc gagaccctgt ccacagccgg 1000  
caccacagag tcagctgcac ctcatgccac ggttgggacc ccactcccca 1050  
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agtggagctc tggtcacagt tagcaggaat cccctggaag aaacctcagc 1150  
cctctctgtt gagacaccaa gttacgtcaa agtctcagga gcagctccgg 1200  
tctccataga ggctgggtca gcagtgggca aaacaacttc ctttgctggg 1250  
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cccttcagag acaccgacca tggacatgc aaccaagggg cccttcccca 1350  
ccagcagga ccctcttctt tctgtccctc cgactacaac caacagcagc 1400  
cgagggacga acagcacctt agccaagatc acaacctcag cgaagaccac 1450  
gatgaagccc caacagccac gccacgact gcccgacga ggccgaccac 1500  
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cagcagctcc accgggaact ccacgccac gcgcctcact tccaggtctc 1650  
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tcccgatgc caaaagaggg tgctgccct agcctgggcc cccaccgaca 1750  
gactgcagct gcgttactgt gctgagaggt acccagaagg ttcccatgaa 1800  
gggcagcatg tccaagcccc taaccccaga tgtggcaaca ggacctcgc 1850  
tcacatccac cggagtgtat gtatggggag gggcttcacc tgttcccaga 1900  
gggtgccttg gactcacctt ggcacatgtt ctgtgtttca gtaaagagag 1950  
acctgatcac ccctctgtgt gcttccatcc tgcattaaaa ttcactcagt 2000  
gtggcccaaa aaaaa 2015

<210> 63  
<211> 482  
<212> PRT  
<213> Homo Sapien

<400> 63  
Met Gly Cys Leu Trp Gly Leu Ala Leu Pro Leu Phe Phe Phe Cys  
1 5 10 15  
Trp Glu Val Gly Val Ser Gly Ser Ser Ala Gly Pro Ser Thr Arg

	20	25	30
Arg Ala Asp Thr	Ala Met Thr Thr Asp	Asp Thr Glu Val Pro	Ala
	35	40	45
Met Thr Leu Ala	Pro Gly His Ala Ala	Leu Glu Thr Gln Thr	Leu
	50	55	60
Ser Ala Glu Thr	Ser Ser Arg Ala Ser	Thr Pro Ala Gly Pro	Ile
	65	70	75
Pro Glu Ala Glu	Thr Arg Gly Ala Lys	Arg Ile Ser Pro Ala	Arg
	80	85	90
Glu Thr Arg Ser	Phe Thr Lys Thr Ser	Pro Asn Phe Met Val	Leu
	95	100	105
Ile Ala Thr Ser	Val Glu Thr Ser Ala	Ala Ser Gly Ser Pro	Glu
	110	115	120
Gly Ala Gly Met	Thr Thr Val Gln Thr	Ile Thr Gly Ser Asp	Pro
	125	130	135
Glu Glu Ala Ile	Phe Asp Thr Leu Cys	Thr Asp Asp Ser Ser	Glu
	140	145	150
Glu Ala Lys Thr	Leu Thr Met Asp Ile	Leu Thr Leu Ala His	Thr
	155	160	165
Ser Thr Glu Ala	Lys Gly Leu Ser Ser	Glu Ser Ser Ala Ser	Ser
	170	175	180
Asp Gly Pro His	Pro Val Ile Thr Pro	Ser Arg Ala Ser Glu	Ser
	185	190	195
Ser Ala Ser Ser	Asp Gly Pro His Pro	Val Ile Thr Pro Ser	Arg
	200	205	210
Ala Ser Glu Ser	Ser Ala Ser Ser Asp	Gly Pro His Pro Val	Ile
	215	220	225
Thr Pro Ser Trp	Ser Pro Gly Ser Asp	Val Thr Leu Leu Ala	Glu
	230	235	240
Ala Leu Val Thr	Val Thr Asn Ile Glu	Val Ile Asn Cys Ser	Ile
	245	250	255
Thr Glu Ile Glu	Thr Thr Thr Ser Ser	Ile Pro Gly Ala Ser	Asp
	260	265	270
Ile Asp Leu Ile	Pro Thr Glu Gly Val	Lys Ala Ser Ser Thr	Ser
	275	280	285
Asp Pro Pro Ala	Leu Pro Asp Ser Thr	Glu Ala Lys Pro His	Ile
	290	295	300
Thr Glu Val Thr	Ala Ser Ala Glu Thr	Leu Ser Thr Ala Gly	Thr
	305	310	315

Thr	Glu	Ser	Ala	Ala	Pro	His	Ala	Thr	Val	Gly	Thr	Pro	Leu	Pro
				320					325					330
Thr	Asn	Ser	Ala	Thr	Glu	Arg	Glu	Val	Thr	Ala	Pro	Gly	Ala	Thr
				335					340					345
Thr	Leu	Ser	Gly	Ala	Leu	Val	Thr	Val	Ser	Arg	Asn	Pro	Leu	Glu
				350					355					360
Glu	Thr	Ser	Ala	Leu	Ser	Val	Glu	Thr	Pro	Ser	Tyr	Val	Lys	Val
				365					370					375
Ser	Gly	Ala	Ala	Pro	Val	Ser	Ile	Glu	Ala	Gly	Ser	Ala	Val	Gly
				380					385					390
Lys	Thr	Thr	Ser	Phe	Ala	Gly	Ser	Ser	Ala	Ser	Ser	Tyr	Ser	Pro
				395					400					405
Ser	Glu	Ala	Ala	Leu	Lys	Asn	Phe	Thr	Pro	Ser	Glu	Thr	Pro	Thr
				410					415					420
Met	Asp	Ile	Ala	Thr	Lys	Gly	Pro	Phe	Pro	Thr	Ser	Arg	Asp	Pro
				425					430					435
Leu	Pro	Ser	Val	Pro	Pro	Thr	Thr	Thr	Asn	Ser	Ser	Arg	Gly	Thr
				440					445					450
Asn	Ser	Thr	Leu	Ala	Lys	Ile	Thr	Thr	Ser	Ala	Lys	Thr	Thr	Met
				455					460					465
Lys	Pro	Gln	Gln	Pro	Arg	Pro	Arg	Leu	Pro	Gly	Arg	Gly	Arg	Pro
				470					475					480

Gln Thr

<210> 64  
 <211> 1252  
 <212> DNA.  
 <213> Homo Sapien

<400> 64  
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 gccactccag aggccatgct tcgtttcttg ccagatttgg ctttcagctt 100  
 cctgttaatt ctggctttgg gccaggcagt ccaatttcaa gaatatgtct 150  
 ttctccaatt tctgggctta gataaggcgc cttcacccca gaagttccaa 200  
 cctgtgcctt atatcttgaa gaaaattttc caggatcgcg aggcagcagc 250  
 gaccactggg gtctcccgag acttatgcta cgtaaaggag ctgggcgtcc 300  
 gcgggaatgt acttcgcttt ctcccagacc aaggtttctt tctttacca 350  
 aagaaaattt cccaagcttc ctctgcctg cagaagctcc tctacttta 400



cctgtctgcc atcaaagaaa ggggaacagtt gacattggcc gagctgggccc 450  
tggacttggg gcccaattct tactataacc tgggaccaga gctggaactg 500  
gctctgttcc tgggttcagga gcctcatgtg tggggccaga ccacccctaa 550  
gccaggtaaa atgtttgtgt tgcggtcagt cccatggcca caaggtgctg 600  
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aaaaatttcg gggtattcct ggagatactg gtcaaagaag atagagactc 700  
aggggtgaat tttcagcctg aagacacctg tgccagacta agatgctccc 750  
ttcatgcttc cctgctgggtg gtgactctca accctgatca gtgccaccct 800  
tctcggaaaa ggagagcagc catccctgtc cccaagcttt cttgtaagaa 850  
cctctgccac cgtcaccagc tattcattaa cttccgggac ctgggttggc 900  
acaagtggat cattgcccc aaggggttca tggcaaatta ctgccatgga 950  
gagtgtccct tctcactgac catctctctc aacagctcca attatgcttt 1000  
catgcaagcc ctgatgcatg ccgttgacct agagatcccc caggctgtgt 1050  
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tc 1252

<210> 65  
<211> 364  
<212> PRT  
<213> Homo Sapien

<400> 65  
Met Leu Arg Phe Leu Pro Asp Leu Ala Phe Ser Phe Leu Leu Ile  
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20 25 30  
Gln Phe Leu Gly Leu Asp Lys Ala Pro Ser Pro Gln Lys Phe Gln  
35 40 45  
Pro Val Pro Tyr Ile Leu Lys Lys Ile Phe Gln Asp Arg Glu Ala  
50 55 60  
Ala Ala Thr Thr Gly Val Ser Arg Asp Leu Cys Tyr Val Lys Glu  
65 70 75  
Leu Gly Val Arg Gly Asn Val Leu Arg Phe Leu Pro Asp Gln Gly

80										85					90				
Phe	Phe	Leu	Tyr	Pro	Lys	Lys	Ile	Ser	Gln	Ala	Ser	Ser	Cys	Leu					
				95					100					105					
Gln	Lys	Leu	Leu	Tyr	Phe	Asn	Leu	Ser	Ala	Ile	Lys	Glu	Arg	Glu					
				110					115					120					
Gln	Leu	Thr	Leu	Ala	Gln	Leu	Gly	Leu	Asp	Leu	Gly	Pro	Asn	Ser					
				125					130					135					
Tyr	Tyr	Asn	Leu	Gly	Pro	Glu	Leu	Glu	Leu	Ala	Leu	Phe	Leu	Val					
				140					145					150					
Gln	Glu	Pro	His	Val	Trp	Gly	Gln	Thr	Thr	Pro	Lys	Pro	Gly	Lys					
				155					160					165					
Met	Phe	Val	Leu	Arg	Ser	Val	Pro	Trp	Pro	Gln	Gly	Ala	Val	His					
				170					175					180					
Phe	Asn	Leu	Leu	Asp	Val	Ala	Lys	Asp	Trp	Asn	Asp	Asn	Pro	Arg					
				185					190					195					
Lys	Asn	Phe	Gly	Leu	Phe	Leu	Glu	Ile	Leu	Val	Lys	Glu	Asp	Arg					
				200					205					210					
Asp	Ser	Gly	Val	Asn	Phe	Gln	Pro	Glu	Asp	Thr	Cys	Ala	Arg	Leu					
				215					220					225					
Arg	Cys	Ser	Leu	His	Ala	Ser	Leu	Leu	Val	Val	Thr	Leu	Asn	Pro					
				230					235					240					
Asp	Gln	Cys	His	Pro	Ser	Arg	Lys	Arg	Arg	Ala	Ala	Ile	Pro	Val					
				245					250					255					
Pro	Lys	Leu	Ser	Cys	Lys	Asn	Leu	Cys	His	Arg	His	Gln	Leu	Phe					
				260					265					270					
Ile	Asn	Phe	Arg	Asp	Leu	Gly	Trp	His	Lys	Trp	Ile	Ile	Ala	Pro					
				275					280					285					
Lys	Gly	Phe	Met	Ala	Asn	Tyr	Cys	His	Gly	Glu	Cys	Pro	Phe	Ser					
				290					295					300					
Leu	Thr	Ile	Ser	Leu	Asn	Ser	Ser	Asn	Tyr	Ala	Phe	Met	Gln	Ala					
				305					310					315					
Leu	Met	His	Ala	Val	Asp	Pro	Glu	Ile	Pro	Gln	Ala	Val	Cys	Ile					
				320					325					330					
Pro	Thr	Lys	Leu	Ser	Pro	Ile	Ser	Met	Leu	Tyr	Gln	Asp	Asn	Asn					
				335					340					345					
Asp	Asn	Val	Ile	Leu	Arg	His	Tyr	Glu	Asp	Met	Val	Val	Asp	Glu					
				350					355					360					
Cys	Gly	Cys	Gly																

<210> 66  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic oligonucleotide probe  
  
 <400> 66  
 gtctgacagc cactccagag 20  
  
 <210> 67  
 <211> 47  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic oligonucleotide probe  
  
 <400> 67  
 tctccaattt ctgggcttag ataaggcgcc ttcaccccag aagttcc 47  
  
 <210> 68  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic oligonucleotide probe  
  
 <400> 68  
 gtcccagggt atagtaagaa ttgg 24  
  
 <210> 69  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic oligonucleotide probe  
  
 <400> 69  
 gtgttgcggt cagtcccatg 20  
  
 <210> 70  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence  
  
 <220>  
 <223> Synthetic oligonucleotide probe  
  
 <400> 70  
 gctgtctccc atttccatgc 20  
  
 <210> 71  
 <211> 24  
 <212> DNA



cctacatcac cttcagtggc tacctgggtca agcacgccac cgagccctag 1150  
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tgaccccacc gcctcttccc cgatccctgg actccgactc cctggctttg 1250  
gcattcagtg agacgccttg cacacacaga aagccaaagc gatcgggtgct 1300  
cccagatccc gcagcctctg gagagagctg acggcagatg aaatcaccag 1350  
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cacatcctca agtgaccccg cacggcgaga cgcgggtggc ggcagggcgt 1450  
cccaggggtg gccaccgcgg ctccagtcct tggaaataat taggcaaatt 1500  
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ccagggaacc ctgggtcccc caggcctgca gatgtttcta tgaggggcag 1950  
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gtcctgagac cagagtcaag aggaagtaca cgtcccaatc acccgtgtca 2400  
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aattgcagga ccagctggag caggggttgcg gtgtctccac ggtgctctcg 2500  
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[illegible]

```
<210> 73
<211> 281
<212> PRT
<213> Homo Sapien
```

<400>	73													
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1				5					10					15
Leu	Ala	Phe	Ala	Ser	Gly	Leu	Val	Leu	Ser	Arg	Val	Pro	His	Val
				20					25					30
Gln	Gly	Glu	Gln	Gln	Glu	Trp	Glu	Gly	Thr	Glu	Glu	Leu	Pro	Ser
				35					40					45
Pro	Pro	Asp	His	Ala	Glu	Arg	Ala	Glu	Glu	Gln	His	Glu	Lys	Tyr
				50					55					60
Arg	Pro	Ser	Gln	Asp	Gln	Gly	Leu	Pro	Ala	Ser	Arg	Cys	Leu	Arg
				65					70					75
Cys	Cys	Asp	Pro	Gly	Thr	Ser	Met	Tyr	Pro	Ala	Thr	Ala	Val	Pro
				80					85					90
Gln	Ile	Asn	Ile	Thr	Ile	Leu	Lys	Gly	Glu	Lys	Gly	Asp	Arg	Gly
				95					100					105
Asp	Arg	Gly	Leu	Gln	Gly	Lys	Tyr	Gly	Lys	Thr	Gly	Ser	Ala	Gly
				110					115					120
Ala	Arg	Gly	His	Thr	Gly	Pro	Lys	Gly	Gln	Lys	Gly	Ser	Met	Gly
				125					130					135
Ala	Pro	Gly	Glu	Arg	Cys	Lys	Ser	His	Tyr	Ala	Ala	Phe	Ser	Val
				140					145					150
Gly	Arg	Lys	Lys	Pro	Met	His	Ser	Asn	His	Tyr	Tyr	Gln	Thr	Val
				155					160					165
Ile	Phe	Asp	Thr	Glu	Phe	Val	Asn	Leu	Tyr	Asp	His	Phe	Asn	Met
				170					175					180
Phe	Thr	Gly	Lys	Phe	Tyr	Cys	Tyr	Val	Pro	Gly	Leu	Tyr	Phe	Phe
				185					190					195
Ser	Leu	Asn	Val	His	Thr	Trp	Asn	Gln	Lys	Glu	Thr	Tyr	Leu	His

[illegible]

```
<210> 74
<211> 24
<212> DNA
<213> Artificial Sequence
```

<220>  
<223> Synthetic oligonucleotide probe

```
<400> 74
tacaggccca gtcaggacca gggg 24
```

```
<210> 75
<211> 24
<212> DNA
<213> Artificial Sequence
```

<220>  
<223> Synthetic oligonucleotide probe

```
<400> 75
ctgaagaagt agaggccggg cacg 24
```

```
<210> 76
<211> 45
<212> DNA
<213> Artificial Sequence
```

<220>  
<223> Synthetic oligonucleotide probe

```
<400> 76
  cccggtgctt gcgctgctgt gaccccggtg cctccatgta cccgg 45
```

```
<210> 77
<211> 1042
<212> DNA
<213> Homo Sapien
```

```
<400> 77
gaattcggca cgaggggaaga agagaaagaa aatctccggg gctgctggga 50
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gcatataaag aagccctgtg gccttgctgg ttttaccatc cagaccagag 100  
 tcaggccaca gacggacatg gctgctcaag gctgggtccat gctcctgctg 150  
 gctgtcctta acctagcat ctctgtccgt ccctgtgaca ctcaagagct 200  
 acgatgtctg tgtattcagg aacactctga attcattcct ctcaaactca 250  
 ttaaaaatat aatgggtgata ttcgagacca tttactgcaa cagaaaggaa 300  
 gtgatagcag tcccaaaaaa tgggagtatg atttgtttgg atcctgatgc 350  
 tccatgggtg aaggctactg ttggcccaat tactaacagg ttcctacctg 400  
 aggacctcaa acaaaaggaa tttccaccgg caatgaagct tctgtatagt 450  
 gttgagcatg aaaagcctct atatctttca tttgggagac ctgagaacaa 500  
 gagaatattt ccttttccaa ttcgggagac ctctagacac tttgctgatt 550  
 tagctcacia cagtgatagg aattttctac gggactccag tgaagtcagc 600  
 ttgacaggca gtgatgcta aaagccactc atgaggcaaa gagtttcaag 650  
 gaagctctcc tcttgaggtt ttggcgttct cattcttata ctctattccc 700  
 gcgttagtct ggtgtatgga tctatgagct ctcttttaat attttattat 750  
 aaatgtttta tttacttaac ttcctagtga atgttcacag gtgactgctc 800  
 ccccatcccc atttcttgat attacatata atggcatcat atacccttt 850  
 attgactgac aaactactca gattgcttaa cattttgtgc ttcaaagtct 900  
 tatcccactc cactatgggc tgttacagag tgcctctcgg ttagagcaa 950  
 ggctccttgt cttcagtgcc ccagggtgaa atacttcttt gaaaaatttt 1000  
 cattcatcag aaaatctgaa ataaaaatat gtcttaattg ag 1042

<210> 78  
 <211> 167  
 <212> PRT  
 <213> Homo Sapien

<400> 78  
 Met Ala Ala Gln Gly Trp Ser Met Leu Leu Leu Ala Val Leu Asn  
 1 5 10 15  
 Leu Gly Ile Phe Val Arg Pro Cys Asp Thr Gln Glu Leu Arg Cys  
 20 25 30  
 Leu Cys Ile Gln Glu His Ser Glu Phe Ile Pro Leu Lys Leu Ile  
 35 40 45  
 Lys Asn Ile Met Val Ile Phe Glu Thr Ile Tyr Cys Asn Arg Lys  
 50 55 60



Glu	Val	Ile	Ala	Val	Pro	Lys	Asn	Gly	Ser	Met	Ile	Cys	Leu	Asp	
				65					70					75	
Pro	Asp	Ala	Pro	Trp	Val	Lys	Ala	Thr	Val	Gly	Pro	Ile	Thr	Asn	
				80					85					90	
Arg	Phe	Leu	Pro	Glu	Asp	Leu	Lys	Gln	Lys	Glu	Phe	Pro	Pro	Ala	
				95					100					105	
Met	Lys	Leu	Leu	Tyr	Ser	Val	Glu	His	Glu	Lys	Pro	Leu	Tyr	Leu	
				110					115					120	
Ser	Phe	Gly	Arg	Pro	Glu	Asn	Lys	Arg	Ile	Phe	Pro	Phe	Pro	Ile	
				125					130					135	
Arg	Glu	Thr	Ser	Arg	His	Phe	Ala	Asp	Leu	Ala	His	Asn	Ser	Asp	
				140					145					150	
Arg	Asn	Phe	Leu	Arg	Asp	Ser	Ser	Glu	Val	Ser	Leu	Thr	Gly	Ser	
				155					160					165	

Asp Ala

<210> 79  
 <211> 798  
 <212> DNA  
 <213> Homo Sapien

<220>  
 <221> unsure  
 <222> 794  
 <223> unknown base

<400> 79  
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 tttggcatcc ccaggaccca aggcagtgat ggaggggctc aggactgttg 100  
 cctcaagtac agccaaagga agattcccg ccaagggtgtc cgcagctacc 150  
 ggaagcagga accaagctta ggctgctcca tcccagctat cctgttcttg 200  
 ccccgcaagc gctctcaggc agagctatgt gcagacccaa aggagctctg 250  
 ggtgcagcag ctgatgcagc atctggacaa gacaccatcc ccacagaaac 300  
 cagcccaggg ctgcaggaag gacagggggg cctccaagac tggcaagaaa 350  
 ggaaagggct ccaaaggctg caagaggact gagcgggtcac agaccctaa 400  
 agggccatag ccagtgagc agcctggagc cctggagacc ccaccagcct 450  
 caccagcgt tgaagcctga acccaagatg caagaaggag gctatgctca 500  
 ggggccttg agcagccacc ccatgctggc cttgccacac tctttctcct 550  
 gctttaacca ccccatctgc attccagct ctaccctgca tggctgagct 600

gcccacagca ggccagggtcc agagagaccg aggagggaga gtctcccagg 650  
gagcatgaga ggaggcagca ggactgtccc cttgaaggag aatcatcagg 700  
accctggacc tgatacggct cccagtaga cccacctct tccttgtaaa 750  
tatgatttat acctaactga ataaaaagct gttctgtctt ccnccca 798

```
<210> 80
<211> 134
<212> PRT
<213> Homo Sapien
```

<400>	80														
Met	Ala	Gln	Ser	Leu	Ala	Leu	Ser	Leu	Leu	Ile	Leu	Val	Leu	Ala	
1				5					10					15	
Phe	Gly	Ile	Pro	Arg	Thr	Gln	Gly	Ser	Asp	Gly	Gly	Ala	Gln	Asp	
				20					25					30	
Cys	Cys	Leu	Lys	Tyr	Ser	Gln	Arg	Lys	Ile	Pro	Ala	Lys	Val	Val	
				35					40					45	
Arg	Ser	Tyr	Arg	Lys	Gln	Glu	Pro	Ser	Leu	Gly	Cys	Ser	Ile	Pro	
				50					55					60	
Ala	Ile	Leu	Phe	Leu	Pro	Arg	Lys	Arg	Ser	Gln	Ala	Glu	Leu	Cys	
				65					70					75	
Ala	Asp	Pro	Lys	Glu	Leu	Trp	Val	Gln	Gln	Leu	Met	Gln	His	Leu	
				80					85					90	
Asp	Lys	Thr	Pro	Ser	Pro	Gln	Lys	Pro	Ala	Gln	Gly	Cys	Arg	Lys	
				95					100					105	
Asp	Arg	Gly	Ala	Ser	Lys	Thr	Gly	Lys	Lys	Gly	Lys	Gly	Ser	Lys	
				110					115					120	
Gly	Cys	Lys	Arg	Thr	Glu	Arg	Ser	Gln	Thr	Pro	Lys	Gly	Pro		
				125					130						

```
<210> 81
<211> 20
<212> DNA
<213> Artificial Sequence
```

<220>  
<223> Synthetic oligonucleotide probe

```
<400> 81
agacatqqct cagtcactqq 20
```

```
<210> 82
<211> 19
<212> DNA
<213> Artificial Sequence
<220>
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<223> Synthetic oligonucleotide probe

<400> 82

gacccctaaa gggccatag 19

<210> 83

<211> 924

<212> DNA

<213> Homo Sapien

<400> 83

aaggagcagc cgcgaagcac caagtgagag gcatgaagtt acagtgtgtt 50  
 tcccttttggc tcctgggtac aatactgata ttgtgctcag tagacaacca 100  
 cggctctcagg agatgtctga tttccacaga catgcaccat atagaagaga 150  
 gtttccaaga aatcaaaaga gccatccaag ctaaggacac cttcccaaatt 200  
 gtcactatcc tgtccacatt ggagactctg cagatcatta agcccttaga 250  
 tgtgtgtctgc gtgaccaaga acctcctggc gttctacgtg gacaggggtgt 300  
 tcaaggatca tcaggagcca aacccccaaa tcttgagaaa aatcagcagc 350  
 attgccaact ctttcctcta catgcagaaa actctgcggc aatgtcagga 400  
 acagaggcag tgtcactgca ggcaggaagc caccaatgcc accagagtca 450  
 tccatgacaa ctatgatcag ctggagggtcc acgctgctgc cattaaatcc 500  
 ctgggagagc tcgacgtctt tctagcctgg attaataaga atcatgaagt 550  
 aatgtttctca gcttgatgac aaggaacctg tatagtgatc cagggatgaa 600  
 cccccctgt gcggtttact gtgggagaca gccaccttg aaggggaagg 650  
 agatggggaa ggcccccttg agctgaaagt cccactggct ggcctcaggc 700  
 tgtcttattc cgcttgaaaa taggcaaaaa gtctactgtg gtattttgtaa 750  
 taaactctat ctgctgaaag ggctgcagg ccacccctgg agtaaagggc 800  
 tgccttccca tctaatttat tgtaaagtca tatagtccat gtctgtgatg 850  
 tgagccaagt gatatcctgt agtacacatt gtactgagtg gtttttctga 900  
 ataaattcca tattttacct atga 924

<210> 84

<211> 177

<212> PRT

<213> Homo Sapien

<400> 84

Met Lys Leu Gln Cys Val Ser Leu Trp Leu Leu Gly Thr Ile Leu  
 1 5 10 15

Ile Leu Cys Ser Val Asp Asn His Gly Leu Arg Arg Cys Leu Ile  
 20 25 30  
 Ser Thr Asp Met His His Ile Glu Glu Ser Phe Gln Glu Ile Lys  
 35 40 45  
 Arg Ala Ile Gln Ala Lys Asp Thr Phe Pro Asn Val Thr Ile Leu  
 50 55 60  
 Ser Thr Leu Glu Thr Leu Gln Ile Ile Lys Pro Leu Asp Val Cys  
 65 70 75  
 Cys Val Thr Lys Asn Leu Leu Ala Phe Tyr Val Asp Arg Val Phe  
 80 85 90  
 Lys Asp His Gln Glu Pro Asn Pro Lys Ile Leu Arg Lys Ile Ser  
 95 100 105  
 Ser Ile Ala Asn Ser Phe Leu Tyr Met Gln Lys Thr Leu Arg Gln  
 110 115 120  
 Cys Gln Glu Gln Arg Gln Cys His Cys Arg Gln Glu Ala Thr Asn  
 125 130 135  
 Ala Thr Arg Val Ile His Asp Asn Tyr Asp Gln Leu Glu Val His  
 140 145 150  
 Ala Ala Ala Ile Lys Ser Leu Gly Glu Leu Asp Val Phe Leu Ala  
 155 160 165  
 Trp Ile Asn Lys Asn His Glu Val Met Phe Ser Ala  
 170 175

<210> 85  
 <211> 2137  
 <212> DNA  
 <213> Homo Sapien

<400> 85  
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 gaaaccgggc cgctaagcga ggccctctcc tccgcagat ccgaacggcc 100  
 tgggcggggt caccctggct gggacaagaa gccgccgcct gcctgcccgg 150  
 gcccggggag ggggctgggg ctggggccgg aggcggggtg tgagtgggtg 200  
 tgtgccccgg gcggaggctt gatgcaatcc cgataagaaa tgctcgggtg 250  
 tcttgggcac ctaccctgtg ggcccgtgtaag gcgctactat ataaggctgc 300  
 cggcccggag ccgccgcgcc gtcagagcag gagcgctgcg tccaggatct 350  
 agggccacga ccatcccaac ccggcactca cagccccgca gcgcatcccg 400  
 gtcgccgccc agcctcccgc acccccatcg ccggagctgc gccgagagcc 450  
 ccagggaggt gccatgcgga gcgggtgtgt ggtggtccac gtatggatcc 500

tggccggcct ctggctggcc gtggccgggc gccccctcgc cttctcggac 550  
 gcggggcccc acgtgcaacta cggctggggc gaccccatcc gcctgcggca 600  
 cctgtacacc tccggccccc acgggctctc cagctgcttc ctgcgcaccc 650  
 gtgccgacgg cgtcgtggac tgcgcgcggg gccagagcgc gcacagtttg 700  
 ctggagatca aggcagtcgc tctgcggacc gtggccatca agggcgtgca 750  
 cagcgtgcgg tacctctgca tgggcgcga cggcaagatg caggggctgc 800  
 ttcagtactc ggaggaagac tgtgctttcg aggaggagat ccgccagat 850  
 ggctacaatg tgtaccgatc cgagaagcac cgctcccgg tctccctgag 900  
 cagtgccaaa cagcggcagc tgtacaagaa cagaggcttt cttccactct 950  
 ctcatcttct gcccatgctg cccatggtcc cagaggagcc tgaggacctc 1000  
 agggggccact tggaatctga catgttctct tcgcccctgg agaccgacag 1050  
 catggaccca tttgggcttg tcaccggact ggaggccgtg aggagtcca 1100  
 gctttgagaa gtaactgaga ccatgcccg gctcttcac tgctgccagg 1150  
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 agtccacggt ctgttttagct ttaggaagaa acatctagaa gttgtacata 1250  
 ttcagagttt tccattggca gtgccagttt ctagccaata gacttgtctg 1300  
 atcataacat tgtaagcctg tagcttgccc agctgctgcc tggggcccca 1350  
 ttctgctccc tcgaggttgc tggacaagct gctgcactgt ctcagttctg 1400  
 cttgaatacc tccatcgatg gggaaactcac ttcctttgga aaaattctta 1450  
 tgtcaagctg aaattctcta atttttctc atcacttccc caggagcagc 1500  
 cagaagacag gcagtagttt taatttcagg aacaggatgat ccactctgta 1550  
 aaacagcagg taaatttcac tcaaccccat gtgggaattg atctatatct 1600  
 ctacttccag ggaccatttg cccttcccaa atccctccag gccagaactg 1650  
 actggagcag gcatggccca ccaggcttca ggagtagggg aagcctggag 1700  
 cccactcca gccctgggac aacttgagaa ttccccctga ggccagttct 1750  
 gtcattgatg ctgtcctgag aataacttgc tgtcccggtg tcacctgctt 1800  
 ccatctccca gccaccagc cctctgccc cctcacatgc ctcccatgg 1850  
 attggggcct ccaggcccc ccaccttatg tcaacctgca cttcttgctt 1900  
 aaaaatcagg aaaagaaaag atttgaagac cccaagtctt gtcaataact 1950

tgctgtgtgg aagcagcggg ggaagaccta gaaccctttc cccagcactt 2000  
ggttttccaa catgatattt atgagtaatt tattttgata tgtacatctc 2050  
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```
<210> 86
<211> 216
<212> PRT
<213> Homo Sapien
```

[illegible]

71





<212> PRT

<213> Homo Sapien

<400> 91

Met	Gly	Thr	Lys	Ala	Gln	Val	Glu	Arg	Lys	Leu	Leu	Cys	Leu	Phe	1	5	10	15
Ile	Leu	Ala	Ile	Leu	Leu	Cys	Ser	Leu	Ala	Leu	Gly	Ser	Val	Thr	20	25	30	
Val	His	Ser	Ser	Glu	Pro	Glu	Val	Arg	Ile	Pro	Glu	Asn	Asn	Pro	35	40	45	
Val	Lys	Leu	Ser	Cys	Ala	Tyr	Ser	Gly	Phe	Ser	Ser	Pro	Arg	Val	50	55	60	
Glu	Trp	Lys	Phe	Asp	Gln	Gly	Asp	Thr	Thr	Arg	Leu	Val	Cys	Tyr	65	70	75	
Asn	Asn	Lys	Ile	Thr	Ala	Ser	Tyr	Glu	Asp	Arg	Val	Thr	Phe	Leu	80	85	90	
Pro	Thr	Gly	Ile	Thr	Phe	Lys	Ser	Val	Thr	Arg	Glu	Asp	Thr	Gly	95	100	105	
Thr	Tyr	Thr	Cys	Met	Val	Ser	Glu	Glu	Gly	Gly	Asn	Ser	Tyr	Gly	110	115	120	
Glu	Val	Lys	Val	Lys	Leu	Ile	Val	Leu	Val	Pro	Pro	Ser	Lys	Pro	125	130	135	
Thr	Val	Asn	Ile	Pro	Ser	Ser	Ala	Thr	Ile	Gly	Asn	Arg	Ala	Val	140	145	150	
Leu	Thr	Cys	Ser	Glu	Gln	Asp	Gly	Ser	Pro	Pro	Ser	Glu	Tyr	Thr	155	160	165	
Trp	Phe	Lys	Asp	Gly	Ile	Val	Met	Pro	Thr	Asn	Pro	Lys	Ser	Thr	170	175	180	
Arg	Ala	Phe	Ser	Asn	Ser	Ser	Tyr	Val	Leu	Asn	Pro	Thr	Thr	Gly	185	190	195	
Glu	Leu	Val	Phe	Asp	Pro	Leu	Ser	Ala	Ser	Asp	Thr	Gly	Glu	Tyr	200	205	210	
Ser	Cys	Glu	Ala	Arg	Asn	Gly	Tyr	Gly	Thr	Pro	Met	Thr	Ser	Asn	215	220	225	
Ala	Val	Arg	Met	Glu	Ala	Val	Glu	Arg	Asn	Val	Gly	Val	Ile	Val	230	235	240	
Ala	Ala	Val	Leu	Val	Thr	Leu	Ile	Leu	Leu	Gly	Ile	Leu	Val	Phe	245	250	255	
Gly	Ile	Trp	Phe	Ala	Tyr	Ser	Arg	Gly	His	Phe	Asp	Arg	Thr	Lys	260	265	270	

Lys Gly Thr Ser Ser Lys Lys Val Ile Tyr Ser Gln Pro Ser Ala  
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Arg Ser Glu Gly Glu Phe Lys Gln Thr Ser Ser Phe Leu Val  
 290 295

<210> 92  
 <211> 24  
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 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 92  
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<210> 93  
 <211> 50  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 93  
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<210> 94  
 <211> 20  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Synthetic oligonucleotide probe

<400> 94  
 acacctgggtt caaagatggg 20

<210> 95  
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<220>  
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<400> 95  
 taggaagagt tgctgaaggc acgg 24

<210> 96  
 <211> 20  
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<220>  
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aaggccttgc agacaaccgt ctggaggctgg ctgtcctcaa aatctgcttc 1000  
tcggatctcc ctcagttctgc ccccgacccc caaactcctc ctggctagac 1050  
tgtaggaagg gacttttgtt tgtttgtttg tttcaggaaa aaagaaaggg 1100  
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<210> 99
<211> 205
<212> PRT
<213> Homo Sapien
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				20					25					30
Ala	Met	Thr	Asp	Gln	Leu	Ser	Arg	Arg	Gln	Ile	Arg	Glu	Tyr	Gln
				35					40					45
Leu	Tyr	Ser	Arg	Thr	Ser	Gly	Lys	His	Val	Gln	Val	Thr	Gly	Arg
				50					55					60
Arg	Ile	Ser	Ala	Thr	Ala	Glu	Asp	Gly	Asn	Lys	Phe	Ala	Lys	Leu
				65					70					75
Ile	Val	Glu	Thr	Asp	Thr	Phe	Gly	Ser	Arg	Val	Arg	Ile	Lys	Gly
				80					85					90
Ala	Glu	Ser	Glu	Lys	Tyr	Ile	Cys	Met	Asn	Lys	Arg	Gly	Lys	Leu
				95					100					105
Ile	Gly	Lys	Pro	Ser	Gly	Lys	Ser	Lys	Asp	Cys	Val	Phe	Thr	Glu
				110					115					120
Ile	Val	Leu	Glu	Asn	Asn	Tyr	Thr	Ala	Phe	Gln	Asn	Ala	Arg	His
				125					130					135
Glu	Gly	Trp	Phe	Met	Ala	Phe	Thr	Arg	Gln	Gly	Arg	Pro	Arg	Gln
				140					145					150
Ala	Ser	Arg	Ser	Arg	Gln	Asn	Gln	Arg	Glu	Ala	His	Phe	Ile	Lys
				155					160					165
Arg	Leu	Tyr	Gln	Gly	Gln	Leu	Pro	Phe	Pro	Asn	His	Ala	Glu	Lys
				170					175					180
Gln	Lys	Gln	Phe	Glu	Phe	Val	Gly	Ser	Ala	Pro	Thr	Arg	Arg	Thr
				185					190					195
Lys	Arg	Thr	Arg	Arg	Pro	Gln	Pro	Leu	Thr					
				200					205					

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<210> 100
<211> 28
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 100
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<210> 101
<211> 24
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

<400> 101
ccggtgacct gcacgtgctt gccca 24

<210> 102
<211> 41
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic oligonucleotide probe

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<221> unsure
<222> 21
<223> unknown base

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<210> 103
<211> 1679
<212> DNA
<213> Homo Sapien

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caaaaaagaa gaaaaagaag aagaaaaaaa atcatgaaaa ccatccagcc 150
aaaaatgcac aattctatct cttgggcaat cttcacgggg ctggctgctc 200
tgtgtctctt ccaaggagtg cccgtgcgca gcggagatgc caccttcccc 250
aaagctatgg acaacgtgac ggtccggcag ggggagagcg ccaccctcag 300
gtgcactatt gacaaccggg tcaccggggt ggctgggta aaccgcagca 350

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ccatcctcta tgctgggaat gacaagtggg gcctggatcc tcgctgggtc 400  
cttctgagca acacccaaac gcagtacagc atcgagatcc agaacgtgga 450  
tgtgtatgac gagggccctt acacctgctc ggtgcagaca gacaaccacc 500  
caaagacctc taggggtccac ctcattgtgc aagtatctcc caaaattgta 550  
gagatttctt cagatatctc cattaatgaa ggaacaata ttagcctcac 600  
ctgcatagca actggtagac cagagcctac ggttacttgg agacacatct 650  
ctcccaaagc ggttggcttt gtgagtgaag acgaatactt ggaaattcag 700  
ggcatcaccg gggagcagtc aggggactac gagtgcagtg cctccaatga 750  
cgtggccgcg cccgtggtag ggagagtaaa ggtcaccgtg aactatccac 800  
catacatttc agaagccaag ggtacaggtg tccccgtggg aaaaagggg 850  
acactgcagt gtgaagcctc agcagtcctc tcagcagaat tccagtggta 900  
caaggatgac aaaagactga ttgaaggaaa gaaaggggtg aaagtggaaa 950  
acagaccctt cctctcaaaa ctcattctt tcaatgtctc tgaacatgac 1000  
tatgggaact acacttgctg ggctccaac aagctggggc acaccaatgc 1050  
cagcatcatg ctatttggtc caggcgccgt cagcgaggtg agcaacggca 1100  
cgtcgaggag ggcaggtgct gtctggctgc tgctcttctt ggtcttgcat 1150  
ctgcttctca aattttgatg tgagtgccac ttccccaccc gggaaaggct 1200  
gccgccacca ccaccaccaa cacaacagca atggcaacac cgacagcaac 1250  
caatcagata tatacaaatg aaattagaag aaacacagcc tcatgggaca 1300  
gaaatttgag ggaggggaac aaagaatact ttggggggaa aagagtttta 1350  
aaaaagaaat tgaaaattgc cttgcagata tttaggtaca atggagtttt 1400  
cttttcccaa acgggaagaa cacagcacac ccggcttgga cccactgcaa 1450  
gctgcatcgt gcaacctctt tgggtgccagt gtgggcaagg gctcagcctc 1500  
tctgccaca gagtgcccc acgtggaaca ttctggagct ggccatccca 1550  
aattcaatca gtccatagag acgaacagaa tgagaccttc cggcccaagc 1600  
gtggcgctgc gggcactttg gtagactgtg ccaccacggc gtgtgttgtg 1650  
aaacgtgaaa taaaagagc aaaaaaaaa 1679

<210> 104  
<211> 344  
<212> PRT  
<213> Homo Sapien









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Pro Gly His Ser	Gly Ala Trp Glu Thr	Ser Gly Gly His Gly	Ile
Phe Gly Ser Gln	Gly Gly Leu Gly Gly	Gln Gly Gln Gly Asn	Pro
Gly Gly Leu Gly	Thr Pro Trp Val His	Gly Tyr Pro Gly Asn	Ser
Ala Gly Ser Phe	Gly Met Asn Pro Gln	Gly Ala Pro Trp Gly	Gln
Gly Gly Asn Gly	Gly Pro Pro Asn Phe	Gly Thr Asn Thr Gln	Gly
Ala Val Ala Gln	Pro Gly Tyr Gly Ser	Val Arg Ala Ser Asn	Gln
Asn Glu Gly Cys	Thr Asn Pro Pro Pro	Ser Gly Ser Gly Gly	Gly
Ser Ser Asn Ser	Gly Gly Gly Ser Gly	Ser Gln Ser Gly Ser	Ser
Gly Ser Gly Ser	Asn Gly Asp Asn Asn	Asn Gly Ser Ser Ser	Gly
Gly Ser Ser Ser	Gly Ser Ser Ser Gly	Ser Ser Ser Gly Gly	Ser
Ser Gly Gly Ser	Ser Gly Gly Ser Ser	Gly Asn Ser Gly Gly	Ser
Arg Gly Asp Ser	Gly Ser Glu Ser Ser	Trp Gly Ser Ser Thr	Gly
Ser Ser Ser Gly	Asn His Gly Gly Ser	Gly Gly Gly Asn Gly	His
Lys Pro Gly Cys	Glu Lys Pro Gly Asn	Glu Ala Arg Gly Ser	Gly
Glu Ser Gly Ile	Gln Gly Phe Arg Gly	Gln Gly Val Ser Ser	Asn
Met Arg Glu Ile	Ser Lys Glu Gly Asn	Arg Leu Leu Gly Gly	Ser
Gly Asp Asn Tyr	Arg Gly Gln Gly Ser	Ser Trp Gly Ser Gly	Gly
Gly Asp Ala Val	Gly Gly Val Asn Thr	Val Asn Ser Glu Thr	Ser



<400> 108

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Ala	Ala	Leu	Cys	Leu	Thr	Gly	Ser	Gln	Ala	Leu	Gln	Cys	Tyr	Ser
				20					25					30
Phe	Glu	His	Thr	Tyr	Phe	Gly	Pro	Phe	Asp	Leu	Arg	Ala	Met	Lys
				35					40					45
Leu	Pro	Ser	Ile	Ser	Cys	Pro	His	Glu	Cys	Phe	Glu	Ala	Ile	Leu
				50					55					60
Ser	Leu	Asp	Thr	Gly	Tyr	Arg	Ala	Pro	Val	Thr	Leu	Val	Arg	Lys
				65					70					75
Gly	Cys	Trp	Thr	Gly	Pro	Pro	Ala	Gly	Gln	Thr	Gln	Ser	Asn	Pro
				80					85					90
Asp	Ala	Leu	Pro	Pro	Asp	Tyr	Ser	Val	Val	Arg	Gly	Cys	Thr	Thr
				95					100					105
Asp	Lys	Cys	Asn	Ala	His	Leu	Met	Thr	His	Asp	Ala	Leu	Pro	Asn
				110					115					120
Leu	Ser	Gln	Ala	Pro	Asp	Pro	Pro	Thr	Leu	Ser	Gly	Ala	Glu	Cys
				125					130					135
Tyr	Ala	Cys	Ile	Gly	Val	His	Gln	Asp	Asp	Cys	Ala	Ile	Gly	Arg
				140					145					150
Ser	Arg	Arg	Val	Gln	Cys	His	Gln	Asp	Gln	Thr	Ala	Cys	Phe	Gln
				155					160					165
Gly	Ser	Gly	Arg	Met	Thr	Val	Gly	Asn	Phe	Ser	Val	Pro	Val	Tyr
				170					175					180
Ile	Arg	Thr	Cys	His	Arg	Pro	Ser	Cys	Thr	Thr	Glu	Gly	Thr	Thr
				185					190					195
Ser	Pro	Trp	Thr	Ala	Ile	Asp	Leu	Gln	Gly	Ser	Cys	Cys	Glu	Gly
				200					205					210
Tyr	Leu	Cys	Asn	Arg	Lys	Ser	Met	Thr	Gln	Pro	Phe	Thr	Ser	Ala
				215					220					225
Ser	Ala	Thr	Thr	Pro	Pro	Arg	Ala	Leu	Gln	Val	Leu	Ala	Leu	Leu
				230					235					240
Leu	Pro	Val	Leu	Leu	Leu	Val	Gly	Leu	Ser	Ala				
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<210> 109

<211> 1813

<212> DNA

<213> Homo Sapien

<400> 109



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ctgaaattag	ctactacca	agagtgaggg	gcagagactt	ccagtcactg	1600
agtctcccag	gcccccttga	tctgtacccc	acccctatct	aacaccaccc	1650
ttggctccca	ctccagctcc	ctgtattgat	ataacctgtc	aggctggctt	1700
ggttagggtt	tactggggca	gaggataggg	aatctcttat	taaaactaac	1750
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<210> 110
<211> 390
<212> PRT
<213> Homo Sapien
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				20					25					30	
Leu	Gln	Leu	His	Leu	Pro	Ala	Asn	Arg	Leu	Gln	Ala	Val	Glu	Gly	
				35					40					45	
Gly	Glu	Val	Val	Leu	Pro	Ala	Trp	Tyr	Thr	Leu	His	Gly	Glu	Val	
				50					55					60	
Ser	Ser	Ser	Gln	Pro	Trp	Glu	Val	Pro	Phe	Val	Met	Trp	Phe	Phe	
				65					70					75	
Lys	Gln	Lys	Glu	Lys	Glu	Asp	Gln	Val	Leu	Ser	Tyr	Ile	Asn	Gly	
				80					85					90	
Val	Thr	Thr	Ser	Lys	Pro	Gly	Val	Ser	Leu	Val	Tyr	Ser	Met	Pro	
				95					100					105	
Ser	Arg	Asn	Leu	Ser	Leu	Arg	Leu	Glu	Gly	Leu	Gln	Glu	Lys	Asp	
				110					115					120	
Ser	Gly	Pro	Tyr	Ser	Cys	Ser	Val	Asn	Val	Gln	Asp	Lys	Gln	Gly	
				125					130					135	
Lys	Ser	Arg	Gly	His	Ser	Ile	Lys	Thr	Leu	Glu	Leu	Asn	Val	Leu	
				140					145					150	
Val	Pro	Pro	Ala	Pro	Pro	Ser	Cys	Arg	Leu	Gln	Gly	Val	Pro	His	
				155					160					165	
Val	Gly	Ala	Asn	Val	Thr	Leu	Ser	Cys	Gln	Ser	Pro	Arg	Ser	Lys	
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<220>

<223> Synthetic oligonucleotide probe

<400> 112

attgtgggcc ttgcagacat agac 24

<210> 113

<211> 50

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

<400> 113

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<210> 114

<211> 2479

<212> DNA

<213> Homo Sapien

<400> 114

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gctggagttc tggacttcaa cagaaccca tccagtcatt ttgattttgc 200

tgttttat ttttttcttt ttctttttcc caccacattg tattttat 250

ccgtacttca gaaatgggcc tacagaccac aaagtggccc agccatgggg 300

cttttttctt gaagtcttgg cttatcat tccctggggct ctactcacag 350

gtgtccaaac tcttgccctg ccctagtgtg tgccgctgcg acaggaactt 400

tgtctactgt aatgagcgaa gcttgacctc agtgccctctt gggatcccgg 450

agggcgtaac cgtactctac ctccacaaca accaaattaa taatgctgga 500

tttctgcag aactgcacaa tgtacagtcg gtgcacacgg tctacctgta 550

tggcaaccaa ctggacgaat tccccatgaa ccttcccaag aatgtcagag 600

ttctccattt gcaggaaaac aatattcaga ccatttcacg ggctgctctt 650

gccagctct tgaagcttga agagctgcac ctggatgaca actccatata 700

cacagtgggg gtggaagacg gggccttccg ggaggctatt agcctcaa 750

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 ggggatggcc gtcagggaat taaatatgaa tcttttgtcc tgtcccacca 1350  
 cgacccccgg cctgcctctc ttcaccccag cccaagtac agcttctccg 1400  
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 ctgggttaact tagagccccg atccacctat cggatttgtt tagtgccact 1750  
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 gagcagacga cgtcccacag catgggctcc ccctttctgc tggcgggctt 1900  
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 <211> 660  
 <212> PRT  
 <213> Homo Sapien

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 Ser Lys Leu Leu Ala Cys Pro Ser Val Cys Arg Cys Asp Arg Asn  
 35 40 45  
 Phe Val Tyr Cys Asn Glu Arg Ser Leu Thr Ser Val Pro Leu Gly  
 50 55 60  
 Ile Pro Glu Gly Val Thr Val Leu Tyr Leu His Asn Asn Gln Ile  
 65 70 75  
 Asn Asn Ala Gly Phe Pro Ala Glu Leu His Asn Val Gln Ser Val  
 80 85 90  
 His Thr Val Tyr Leu Tyr Gly Asn Gln Leu Asp Glu Phe Pro Met  
 95 100 105  
 Asn Leu Pro Lys Asn Val Arg Val Leu His Leu Gln Glu Asn Asn  
 110 115 120  
 Ile Gln Thr Ile Ser Arg Ala Ala Leu Ala Gln Leu Leu Lys Leu  
 125 130 135  
 Glu Glu Leu His Leu Asp Asp Asn Ser Ile Ser Thr Val Gly Val  
 140 145 150  
 Glu Asp Gly Ala Phe Arg Glu Ala Ile Ser Leu Lys Leu Leu Phe  
 155 160 165  
 Leu Ser Lys Asn His Leu Ser Ser Val Pro Val Gly Leu Pro Val  
 170 175 180  
 Asp Leu Gln Glu Leu Arg Val Asp Glu Asn Arg Ile Ala Val Ile  
 185 190 195  
 Ser Asp Met Ala Phe Gln Asn Leu Thr Ser Leu Glu Arg Leu Ile  
 200 205 210  
 Val Asp Gly Asn Leu Leu Thr Asn Lys Gly Ile Ala Glu Gly Thr  
 215 220 225  
 Phe Ser His Leu Thr Lys Leu Lys Glu Phe Ser Ile Val Arg Asn

	230		235		240
Ser Leu Ser His	Pro Pro Pro Asp Leu	Pro Gly Thr His Leu	Ile		
	245	250	255		
Arg Leu Tyr Leu	Gln Asp Asn Gln Ile	Asn His Ile Pro Leu	Thr		
	260	265	270		
Ala Phe Ser Asn	Leu Arg Lys Leu Glu	Arg Leu Asp Ile Ser	Asn		
	275	280	285		
Asn Gln Leu Arg	Met Leu Thr Gln Gly	Val Phe Asp Asn Leu	Ser		
	290	295	300		
Asn Leu Lys Gln	Leu Thr Ala Arg Asn	Asn Pro Trp Phe Cys	Asp		
	305	310	315		
Cys Ser Ile Lys	Trp Val Thr Glu Trp	Leu Lys Tyr Ile Pro	Ser		
	320	325	330		
Ser Leu Asn Val	Arg Gly Phe Met Cys	Gln Gly Pro Glu Gln	Val		
	335	340	345		
Arg Gly Met Ala	Val Arg Glu Leu Asn	Met Asn Leu Leu Ser	Cys		
	350	355	360		
Pro Thr Thr Thr	Pro Gly Leu Pro Leu	Phe Thr Pro Ala Pro	Ser		
	365	370	375		
Thr Ala Ser Pro	Thr Thr Gln Pro Pro	Thr Leu Ser Ile Pro	Asn		
	380	385	390		
Pro Ser Arg Ser	Tyr Thr Pro Pro Thr	Pro Thr Thr Ser Lys	Leu		
	395	400	405		
Pro Thr Ile Pro	Asp Trp Asp Gly Arg	Glu Arg Val Thr Pro	Pro		
	410	415	420		
Ile Ser Glu Arg	Ile Gln Leu Ser Ile	His Phe Val Asn Asp	Thr		
	425	430	435		
Ser Ile Gln Val	Ser Trp Leu Ser Leu	Phe Thr Val Met Ala	Tyr		
	440	445	450		
Lys Leu Thr Trp	Val Lys Met Gly His	Ser Leu Val Gly Gly	Ile		
	455	460	465		
Val Gln Glu Arg	Ile Val Ser Gly Glu	Lys Gln His Leu Ser	Leu		
	470	475	480		
Val Asn Leu Glu	Pro Arg Ser Thr Tyr	Arg Ile Cys Leu Val	Pro		
	485	490	495		
Leu Asp Ala Phe	Asn Tyr Arg Ala Val	Glu Asp Thr Ile Cys	Ser		
	500	505	510		
Glu Ala Thr Thr	His Ala Ser Tyr Leu	Asn Asn Gly Ser Asn	Thr		
	515	520	525		

92

acgcagattt gagaaggctg tc 22

<210> 119

<211> 46

<212> DNA

<213> Artificial Sequence

<220>

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<210> 120

<211> 2857

<212> DNA

<213> Homo Sapien

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<211> 772

<212> PRT

<213> Homo Sapien

<400> 121

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His His Ile Gly Gln Leu Arg Ser Asp Leu Asp Asn Gly Asn Asn  
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Ser Phe Gln Tyr Lys Leu Leu Gly Ala Gly Ala Gly Ser Thr Phe  
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Asp Arg Glu Glu Arg Ser Leu Tyr Ile Leu Arg Ala Gln Val Ile  
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Asp Ile Ala Thr Gly Arg Ala Val Glu Pro Glu Ser Glu Phe Val  
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Ile Lys Val Ser Asp Ile Asn Asp Asn Glu Pro Lys Phe Leu Asp  
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Glu Pro Tyr Glu Ala Ile Val Pro Glu Met Ser Pro Glu Gly Thr  
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Tyr	Ser	Ile	Thr	Arg 410	Ser	Lys	Val	Phe	Asn 415	Ile	Asn	Asp	Asn	Gly 420
Thr	Ile	Thr	Thr	Ser 425	Asn	Ser	Leu	Asp	Arg 430	Glu	Ile	Ser	Ala	Trp 435
Tyr	Asn	Leu	Ser	Ile 440	Thr	Ala	Thr	Glu	Lys 445	Tyr	Asn	Ile	Glu	Gln 450
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 Gly Glu Lys Leu Phe His Gly Val Ser Met Ser Glu Arg Cys Tyr

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Phe Leu Ala Arg Leu Ser Asn Arg Leu Ser Thr Cys His Ile Glu					
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Gly Asp Asp Leu His Ile Gln Arg Asn Val Gln Lys Leu Lys Asp					
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Thr Val Lys Lys Leu Gly Glu Ser Gly Glu Ile Lys Ala Ile Gly					
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Gln	Thr	Gln	His	Thr 125	Pro	Arg	Thr	Met	Gln 130	Val	His	Leu	Thr	Val 135	
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Glu	Trp	Tyr	Lys	Gly 260	Glu	Lys	Lys	Leu	Phe 265	Asn	Gly	Gln	Gln	Gly 270	
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Ser	Cys	Trp	Tyr	Leu 335	Val	Leu	Thr	Leu	Ser 340	Ser	Phe	Thr	Ser	Ile 345	

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 ccaaaataag agcaaattcg ctctaaacac aggaaaagac ctgaagcttt 250  
 aattaagggg ttacatccaa cccagagcg cttttgtggg cactgattgc 300  
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 ataggagagg aagctcggga ggtggccagg cggcaggaag gcgcaccccc 750  
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 20 25 30  
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 35 40 45

[illegible]

Leu Leu Ser Gly Ala Thr Ala Thr Ala Ala Leu Pro Leu Glu Gly  
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Ile Arg Lys Ser Ser Leu Leu Thr Phe Leu Ala Trp Trp Phe Glu  
95 100 105

Arg Glu Val Ala Arg Arg Gln Glu Gly Ala Pro Pro Gln Gln Ser  
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<223> Synthetic oligonucleotide probe

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<213> Artificial Sequence
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<220>  
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<211> 45
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<220>  
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<213> Homo Sapien

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aatggagtga gcctgtctgt gagcaaaaaa cccatgacga aacgggtccc 700
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ggatgagaat gatgtttttg acaagctaag tgtcattgca gaagactctg 950
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agaagttggc cactgagagt gtaattttca gccttttata tcactaaaat 1300
aagatcatgt tttaattgtg agaaacaggg ccgagcacag tggtcacgc 1350
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114

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 35 40 45  
 Gln Gln His Phe Gly Pro Arg Val Gln Ile Asp Val Tyr Glu Lys  
 50 55 60  
 Gly Thr Val Gly Gly Arg Leu Ala Thr Ile Ser Val Asn Lys Gln  
 65 70 75  
 His Tyr Glu Ser Gly Ala Ala Ser Phe His Ser Leu Ser Leu His  
 80 85 90  
 Met Gln Asp Phe Val Lys Leu Leu Gly Leu Arg His Arg Arg Glu  
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 Val Val Gly Arg Ser Ala Ile Phe Gly Gly Glu His Phe Met Leu

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Glu Glu Thr Asp	Trp 125	Tyr Leu Leu Asn 130	Leu Phe Arg Leu Trp 135
His Tyr Gly Ile	Ser 140	Phe Leu Arg Leu 145	Gln Met Trp Val Glu Glu 150
Val Met Glu Lys	Phe 155	Met Arg Ile Tyr 160	Lys Tyr Gln Ala His Gly 165
Tyr Ala Phe Ser	Gly 170	Val Glu Glu Leu 175	Leu Tyr Ser Leu Gly Glu 180
Ser Thr Phe Val	Asn 185	Met Thr Gln His 190	Ser Val Ala Glu Ser Leu 195
Leu Gln Val Gly	Val 200	Thr Gln Arg Phe 205	Ile Asp Asp Val Val Ser 210
Ala Val Leu Arg	Ala 215	Ser Tyr Gly Gln 220	Ser Ala Ala Met Pro Ala 225
Phe Ala Gly Ala	Met 230	Ser Leu Ala Gly 235	Ala Gln Gly Ser Leu Trp 240
Ser Val Glu Gly	Gly 245	Asn Lys Leu Val 250	Cys Ser Gly Leu Leu Lys 255
Leu Thr Lys Ala	Asn 260	Val Ile His Ala 265	Thr Val Thr Ser Val Thr 270
Leu His Ser Thr	Glu 275	Gly Lys Ala Leu 280	Tyr Gln Val Ala Tyr Glu 285
Asn Glu Val Gly	Asn 290	Ser Ser Asp Phe 295	Tyr Asp Ile Val Val Ile 300
Ala Thr Pro Leu	His 305	Leu Asp Asn Ser 310	Ser Ser Asn Leu Thr Phe 315
Ala Gly Phe His	Pro 320	Pro Ile Asp Asp 325	Val Gln Gly Ser Phe Gln 330
Pro Thr Val Val	Ser 335	Leu Val His Gly 340	Tyr Leu Asn Ser Ser Tyr 345
Phe Gly Phe Pro	Asp 350	Pro Lys Leu Phe 355	Pro Phe Ala Asn Ile Leu 360
Thr Thr Asp Phe	Pro 365	Ser Phe Phe Cys 370	Thr Leu Asp Asn Ile Cys 375
Pro Val Asn Ile	Ser 380	Ala Ser Phe Arg 385	Arg Lys Gln Pro Gln Glu 390
Ala Ala Val Trp	Arg 395	Val Gln Ser Pro 400	Lys Pro Leu Phe Arg Thr 405

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<220>

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<212> DNA

<213> Artificial Sequence

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<400> 141

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<210> 142

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic oligonucleotide probe

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<210> 143

<211> 18

<212> DNA

<213> Artificial Sequence

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<223> Synthetic oligonucleotide probe

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 <210> 145  
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